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Rochester Institute of Technology

A Thesis Submitted to the Faculty of  
The College of Fine and Applied Arts  
in Candidacy for the Degree of

MASTER OF FINE ARTS

FORGED SCULPTURE

BY

David P. Kenney

MARCH 24, 1980

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In opening this work, it becomes important to discuss how theses written in this field may take form.

Essentially, it is "given" that a thesis is an independently prepared presentation offered by a practitioner to his respective faculty; and that this presentation may manifest itself in one of many widely varied formats. Fundamental to this presentation, regardless of how it may manifest itself, is that it is intended to cause the author to reflect upon his work and formulate a concrete statement identifying his stance relative to the field.

In the field of metalsmithing, we may find it appropriate for one to identify his relative stance in terms of categories such as matter (the physical science of materials), technique (the actual manipulation of materials), aesthetics (how the contemplation of objects affects us), and philosophy (why one does what he does). The choice of focus or approach is more or less dependent upon which aspects of the field the individual finds most exciting or important.

There is, however, something special about preparing the literature of the creative arts; and I feel that it resides in the level and extent of personal engagement required of all of the involved participants. In light of that, I have chosen not to approach this project in terms of what may fit a more classical research - report format. I have chosen instead to approach it on a more intimate philosophical level. I hope this will allow me to produce a thesis which will be a small personal gift to the literature of the art. I wish it to be a document that only I could produce as a result of my training and experience within the field.

In the body of the thesis, I intend to discuss the philosophical background and the thematic content of my recent works. In other words, I want to decipher the metaphor in the works in order to expose the statements embodied in the visual products. I intend to explain how, in light of my philosophy, I feel that I am drawn to produce these sculptures as well as why the format and processes employed are appropriate to resolving the statements.

The sculptures that we are considering share related goals and themes. We are able to establish categorical titles such as "force", "travel", or "time" for the sake of initially defining and identifying those themes. However, the pieces do more than simply provide a depiction of certain phenomena as they may occur. The concepts are not restricted to notions about the transversal of space by objects within their respective fluid media such as can be seen as a major design consideration in the "streamlined" sensibilities of the 1930's and 1940's.<sup>1</sup>

To differentiate the notions I am referring to from those originating in "streamlining" more fully, I would like to turn to a part of the introduction of a book entitled The Streamlined Decade by Donald J. Bush. Here, the following is pointed out:

"The desire to perform actions quickly, easily and without disruptions is a twentieth-century phenomenon evident in advanced-technology countries, especially the United States. It is manifest both in processes and in objects. One can cite such diverse examples as industrial time-motion studies, the superhighway system and the modern compact kitchen. 'Streamlining', a term with origins in science, has become commonplace in our language. It is synonymous with saving time and energy, and streamlined forms are emblematic of speed and efficiency. These forms are usually characterized by rounded edges, smooth surfaces and low horizontal profiles. All are simplified by the design principle of 'absorption', the merging of one sub-form into another with transitional curves,

and 'reductivism', the elimination of extraneous details. The resultant forms are intended to penetrate air or water with the least resistance. They contrast with angular geometric forms and tend to resemble the organic forms in nature. Indeed, natural forms like fish and birds, suggested low-resistance forms to the scientists who pioneered hydrodynamics and aerodynamics.

Man-made streamlined designs, then, facilitate processes. The streamlined vehicle makes travel faster or more efficient. The superhighway eliminates the disruptions of intersections; its gradual transitional curves allow drivers to transfer from one system to another and its ramps afford entry and exit - all with minimal loss of time. The well-arranged modern kitchen saves steps and its rounded corners and smooth continuous working surfaces facilitate cleaning. In each of these examples, the intention is to provide forms that serve continuous activities with the least effort and fewest stoppages. The streamlined form can be seen as an example of functional design."<sup>2</sup>

The difference between developing functional design or providing a simple depiction of how energized objects may behave and what I am trying to accomplish sculpturally lies in that I am attempting to capture and allude to a psychological event. I intend to accomplish this through the embodiment of a spiritual element in a physically gestural element rather than through the provision of a pictorial representation or a schematic diagram of a potential physical event. (See Figures 2 & 3).

I would note here that I am using the expressions "psychological event" and "spiritual element" to refer to certain human emotional experiences. I do not wish to confuse the kind of spirituality here with the kind which is perhaps most commonly associated with religious functionings. We may find that there are certain characteristic psychological or emotional responses to spiritual elements or events whether in a religious or sculptural context. These responses may, for example, include the sensing of elation, or exhilaration, or the sensing of being in touch with the "eternal" or the "ethereal". The difference I am trying to point out is that in the religious context, there is established the

desired end of sensing metaphysical realms in terms of "God". Here, although a spiritual sensation is desired, it is to be understood in terms of the individual viewer's interpretations of the cosmological without reference to an external pre-determined goal such as "God". The concepts involved may better be discussed in terms of some of my notions about perception or how I want the viewer to respond while encountering the pieces.

These works are, as suggested earlier, intended to cause the beholder to experience sensations related to the perceiving of force or travel or time. In this case, however, it is not meant that these phenomena are to be viewed as we usually do - as measurable commodities. The force is not to be seen in terms of pounds-per-square-inch per-second of thrust or impact; the time is not to be seen as measurable by the clock or calendar; and the travel is not to be seen as being accomplished by the physical transportation of objects. It is important in looking at these works to keep in mind that we should see those commodities metaphorically and not strictly as physical functions.

I would like to extend this notion by way of referring to another passage found in The Streamlined Decade by Donald J. Bush. Here we find a discussion concerning Constanti Brancusi and one of his works entitled "Bird in Space" (1943). (See Figure 3). Here it was said that:

"Despite its organic form and hand finish, 'Bird in Space' (1943) continues to be compared with propellers, torpedoes and rockets as though it alluded to modern technology. Athena Spear reminds us that the first in the bird series (1919) was developed between the World Wars, a formative period in modern ballistics.

It was the concept of flight rather than the mechanics of flight that interested Brancusi, and he fused his concept with the vital form of the bird. 'Bird in Space' is an essence removed from the confusions and irrelevancies of nature. His sculptural program paralleled the modern scientist who isolates a phenomenon and controls

variables in order to approach a fundamental truth. In several 'fish', Brancusi recognized the functional quality of the creature and its seemingly effortless motion. His purified versions are without detail and are not unlike Cayley's 'true form of least resistance'. These hydrodynamical idea forms are expressive of the 'elan vital' in nature,

'...when you see a fish, you do not think of its scales, do you? You think of its floating, flashing body seen through water...Well, I've tried to express just that. If I made fins and eyes and scales, I would arrest its movement and hold you by a pattern, or a shape of reality. I want just the flash of its spirit'.

Brancusi's understanding of nature was spiritual rather than scientific, and he sought to express the spirit of each creature in a refined, abstract form."<sup>3</sup>

The fundamental message is that in spite of the format and visual qualities of Brancusi's "Bird", which may encourage the formulation of allusions to industrial forms or the figure of the bird itself, he is not merely describing physical characteristics. He is talking about the innate response that we have to the vital nature of the bird - or that which we call its spirit.

Turning more specifically to the problem here, I would point out that we now have a very similar situation. As we look at the sculptures I have produced, we find that the forms themselves reveal much about the physical energy required to cause them to exist. The heavy crushed ends of the pieces do in-fact tend to allude to a statement about impact. It would be wrong to say that it is not part of the total statement. However, if we look back to Brancusi's example, we are reminded that there is a greater poetic implication embodied in sculptural form and that superficial analysis will tend to be inaccurate.

Therefore, as an audience reviewing these pieces, we must pay attention to the compositional considerations which will indicate that they do not



refer strictly to physical energy. (See Photos). A main element along this line is the incorporation of bases and the consequent relationships established between the figures and their bases. The use of the base in the sculptural format may serve many functions. In his book, Beyond Modern Sculpture, Jack Burnham has pointed out that:

"The base is the sculptor's convention for rooting his art to surrounding reality while permitting it to stand apart. As such, the base creates a twilight zone both physically and psychically. It says, in effect, that this sculpted object has a life, a 'presence' of its own. Its use to support various top-heavy standing figures, and to provide a perch to minimize damage, are the obvious physical reasons for its existence; beyond that, the base helps to create an aura of distance and dignity around the favored object. Moreover, Western tradition has been consistent in its use of the base as an appendage to sculpture. Within the representational idiom in general, the base has served to isolate and emphasize the particular psychology and anecdotal content of the activity it supports."<sup>4</sup>

In other words, the base is important in terms of providing proper residence for the sculptural event. This is how I feel the bases I have used actually perform. They set the stage for the event; but otherwise they are inert. By the use of the expression "inert", I mean that the bases are geometrically stable and do not, by their form alone, imply a physical reaction to impact. The inertia of the bases allows us to see the objects more clearly. It also helps us to go beyond seeing the total statement of each piece as only an allusion to characteristics of physical energy.

In a similar way, in light of the compositional characteristics of the opposite extremities of the objects (the points), we must conclude that something beyond physical force is being taken into consideration. This is because of the fact that if we were only trying to visually discuss something about impact, the extremes to which the forms have been extruded would have been superfluous.

It would be fair to ask at this point: "How do these pieces transcend themselves as physical objects, and what is it that they are intended to refer to other than the physical qualities so prevalent in their appearance?"

To answer the first part of the question, I would point out that there are two factors that influence any object's ability to transcend itself and to communicate. Both the contextual placement of the object and the disposition of its audience play major roles in establishing that object's ultimate significance.

The surroundings in which we find an object may partially or totally determine how we understand the meaning of that object. The object's environment gives us a reference point which we may use to begin or to check our interpretations of what we see. Just as a base sets the stage for a sculptural event, the contextual placement sets the stage for our encounter with that event. For example, if we were to come upon certain plumbing fixtures in a bathroom, we would recognize them readily and know how to respond to them. However, if we were to come upon the same fixtures in a sculpture court, we would recognize them as a part of a communications scheme. The new environment would modify our interpretations of their overall significance.

In the case of the objects we are discussing here, it is intended that they will be placed in a gallery or some other equivalent formal viewing area. Under such circumstances, they become set apart as art objects and they are to be seen as vehicles for communication.

The disposition of the audience has a great influence on an object's ability to communicate. It is the responsibility of the audience to be receptive. In this case, "receptivity" refers to being in an open minded

state. Viewers can diminish their ability to welcome artworks if they allow personal tastes to limit what they will accept. A beholder may totally miss the point if he disregards the work on the basis that he does not like certain colors used in the pieces.

Observers can also close themselves off to experiences if they try to anticipate how they may benefit or what they may sense as a result of confronting the objects in question. In other words, artworks cannot produce a specific product such as could be accomplished by engaging a piece of machinery to stamp out parts for another machine. Artworks can not fullfill cravings for experience as in the way that going to a restaurant could satisfy a desire for foods. By approaching art objects with pre-set attitudes, tastes, or expectations, the audience runs the risk of partially or totally reducing its sensitivity to what it sees; and as such may never allow those works to reveal themselves fully.

Art objects are created in reference to perceivable phenomena, although not necessarily in a direct literal correspondence. If we view art as strictly analogical, we may deny its poetry and lose the ability to fully comprehend it. As the discussion of Brancusi's work pointed out earlier, a mechanistic view of things can lead us to an incomplete and inaccurate assessment of the works. Viewers must realize that this particular type of object exists for the sake of being contemplated and revealing its implicit information as a result. The audience must be ready to accept art in terms of its potential for metaphor.

An important qualification to note is that the "perceivable phenomena" I have mentioned do not necessarily exist as quiddities outside ourselves.

That classification is intended to include those things which are humanly experiential in nature.

This introduces my response to the second part of the question which was concerned with the thematic content of the sculptures. They contain metaphors for a particular human experience. We can decipher their poetic code in the following manner.

As we study the pieces (See Photos), several things become immediately apparent. We find in the pieces a strong physical presence (in part due to the scale of the objects and their physical reach in relationship to their foundations), the suggestion of movement (due to the basically linear quality of the forged elements), as well as a strong polarity between the heavy crushed ends and the fine tapered points. It is understanding this polarity which is most important to totally understanding the works.

It is through the comparison established in that polar format as well as through the thrusting gestures of the pieces that I intend to establish a dialectic comparison between physicality and spirituality.

This dialectic comparison is based upon what could be recognized as a relatively basic human fantasy; but more specifically as a discrete component of my own psychological character. It is the desire for transcendence of the body that I am referring to.

Plainly stated, the theme of these pieces is that although I know myself to be an earthbound being, I also recognize the potential existence of a spiritual realm which I yearn to experience. In spite of my own earthliness, I want to be able to get outside of myself to experience something which is perhaps infinite; but still be able to return to my original state.

When looking at the sculptures, we can now recognize the visual components in a symbolic sense seeing the heavy crushed ends as a gathering of energy - an earthly origin for the event; the tapered shafts traveling towards the points as a transitional journey; and the points themselves as simultaneous entries and exits to and from the infinite.

The works also contain certain temporal components. Here the main involvement is a comparison between an occurred versus an occurring event. The presented image is an established fact - an occurred event. However, that image indicates transmutation - an occurring event. There is a static object indicating change of form and the passage of time. In a way, there is established a comparison between chronological and imaginary time. That comparison is based upon the difference between the chronological (real) time used by the beholder and the imaginary time he may sense upon contemplating the infinite or eternal.

Up to this point, I have included no discussion about the materials or techniques that I have employed in the creation of my works. Undertaking a full technical examination of their manufacture would be irrelevant. It would not contribute to the understanding of the pieces. Also, none of the materials or processes I have used are exotic; and there are many readily available publications on blacksmithing and welding that can supply more information than I would have to cover here.

I do not intend to discuss the techniques except in how their use has contributed to the symbolic results.

The sculptures are made of forged and welded steel. That fact is significant to the work in the following ways. Steel is a material of great plasticity and tensile strength. It lends itself by its very nature to the production of the kind of physical forms that I have used in the sculptures. It is possible that other materials could, in fact, be used to create identical forms. However, I think that steel is an appropriate choice here. It is symbolically related to earthliness. Moreover, working steel requires significant energy. It is not the difficulty of working steel that I find important, but the fact that it requires me to relate to it on a physical level. Establishing that physical relationship between myself and my material is fundamental. It enhances my ability to sense the material in a visceral way, thus, actually helping me to communicate through it. Another significant characteristic of working steel by forging is that steel is thermoplastic. Heat from the forge renders the steel soft enough to move upon command - to be a responsive "fluid" medium (in the sense of ductility). Upon its cooling, however, it will return to a rigid unyielding state. The importance of this in terms of my desired result is related to the fact that it introduces an element of time. In other words, as I am working a piece of hot moving steel, I can stop whenever I feel the form has reached its most expressive point and freeze it. It is somewhat like freezing motion with a strobe light. Each hammer blow as well as each twist delivered to the steel renders a discrete product in terms of form or surface. Each result can be studied and subsequently accentuated or removed until the workpiece can be considered completed. Working with this time factor allows me to watch the form develop. I find that this enhances my control over the gesture and expressive qualities of each object.

Forging is an art of extremes. Sometimes it involves great heat, impact, and physical endurance to move the steel. Other times it involves very delicate manipulation of the fire, the hammer, and the workpiece to make the form stand up to the desired result. I feel of myself that I am an individual who tends to enjoy extremes. For example, I enjoy contemplating my physical realm as well as contemplating ethereal realms. In these ways, that it suits my character and that it lends itself to the production of what I have found to be special forms, I find the forging of steel to be fundamental in the resolution of my sculptural messages.

It is ultimately of greater importance for me to know this. For the audience, how the objects were given birth should be seen as unimportant. It is important, however, that the beholders do "get the message" from the pieces.

In relation to that, I would like to cite certain excerpts from a 1952 speech by sculptor David Smith. In spite of the fact that this speech was delivered nearly thirty years ago, and that Smith generally maintained a more dogmatic attitude than I, his statements are still important to the art world in general and I find that they tend to summarize much of how I feel about the nature of artworks. He put forth the following statements:

"Aesthetics are written conclusions or directives. The creative artist should not be impressed by verbal directives. His aesthetics are primarily unconscious and of a visual recording. No words or summations are involved. The artist does not deny aesthetics or the history of art. The myth in art, the history of art, are both enjoyed and used, but they are utilized by the memory of vision which is the only language in which the artist who made the work of art intended it to be understood"...

"... To the creative artist it is his beauty, but to the audience, who will wait for the aesthetician's explanation, it is too new and has not yet hammered its way into acceptance. It will not conform to the past, it is beyond the pale. Art aestheticians can only make conclusions or discourse after the work of art is made. The birth of the idea, the concept, is the important act in the work of art"...

"...Nobody understands art but the artist because nobody is as interested in art, its pursuit, its making, as the artist. This need eliminate no one from enjoying any art - if they do not limit it with preconceived notions of what art should be or demand confinement in which it should stay. The true way to understand the work of art is to travel the path by visual response, similar to the method the artist used in arriving at the work".<sup>5</sup>

In light of these statements, and as a result of my own experiences in the field, I feel that we can conclude several things. First is that the purpose of art is that of communication. In this case, the transmission of sensations or information is accomplished as a result of visual encounter. Second, the audience should respond to the works in terms of visual discourse while not allowing prejudice or externally provided explanations to influence that encounter.

In Smith's use of the expression to "travel the path by visual response", he provides what I think is an excellent model of the mechanics of art. It is a model which I feel ultimately explains the only way in which the artist can produce his works. It also provides the only way in which the viewer is enabled to allow those works to reveal the information embodied within them.



FIGURE #1.

"AN APPROXIMATION OF THE EFFECTS  
CREATED IN A FLOW"

FROM

THE STREAMLINED DECADE

BY

DONALD J. BUSH

p. 5

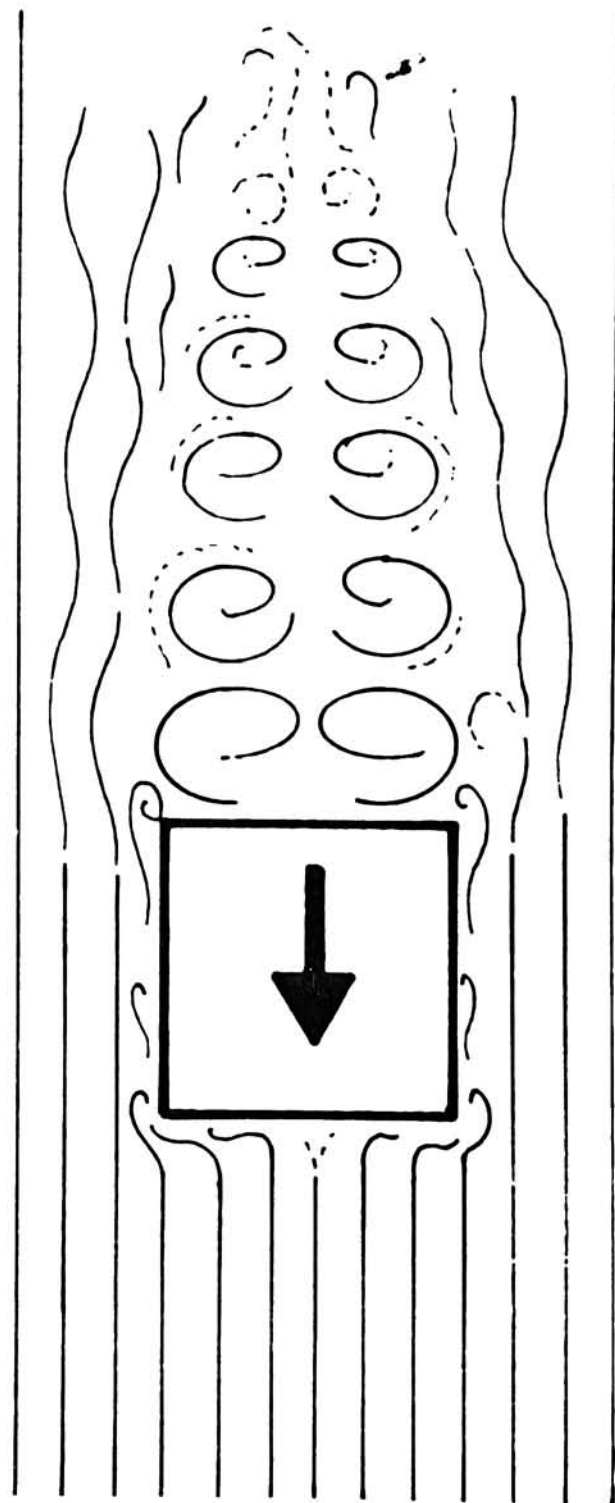
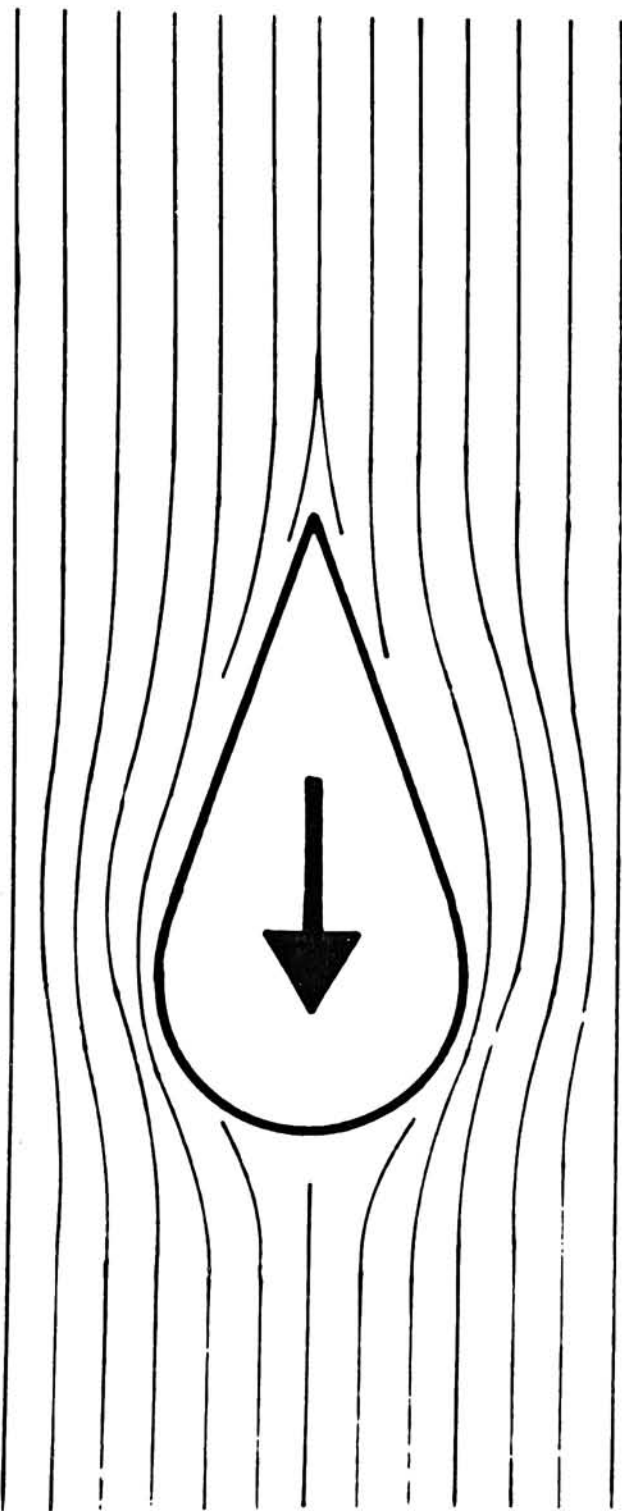


FIGURE #2.

"ARTIST'S CONCEPTION OF  
A SUBMARINE"

(OFFICIAL U. S. NAVY PHOTO)

FROM

THE STREAMLINED DECADE

BY

DONALD J. BUSH

p. 8



FIGURE #3.

"BIRD IN SPACE"

BY

CONSTANTIN BRANCUSI

(1943)

FROM

THE STREAMLINED DECADE

BY

DONALD J. BUSH



PHOTOGRAPH #1.

"STEEL SCULPTURE"

BASE:

10.5" x 12.5" x 1"

TAPER:

APPROXIMATELY 48"

TOTAL HEIGHT:

35"





PHOTOGRAPH #2.

"STEEL SCULPTURE"

BASE:

14.75" x 14.75" x 2.75"

TAPER:

APPROXIMATELY 114"

TOTAL HEIGHT:

109"



PHOTOGRAPH #3.

"STEEL SCULPTURE"

BASE:

14" x 14" x 2.5"

TAPER:

APPROXIMATELY 80.5"

TOTAL HEIGHT:

80"



PHOTOGRAPH #4.

DETAIL OF PHOTOGRAPH #3.



## FOOTNOTES

<sup>1</sup>Donald J. Bush, The Streamlined Decade (New York: George Braziller, 1975), pp. 1 - 3.

<sup>2</sup>Bush, pp. 1 - 2.

<sup>3</sup>Bush, p. 11.

<sup>4</sup>Jack Burnham, Beyond Modern Sculpture (New York: George Braziller, 1978), p. 19.

<sup>5</sup>Garnett McCoy, ed. David Smith (New York: Praeger Publishers, 1973), pp. 88; 105.

## BIBLIOGRAPHY

Burnham, Jack. Beyond Modern Sculpture.

New York: George Braziller, 1978.

Bush, Donald J. The Streamlined Decade.

New York: George Braziller, 1975.

McCoy, Garnett, ed. David Smith

New York: Praeger Publishers, 1973.